

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization International Bureau



(43) International Publication Date
13 May 2004 (13.05.2004)

PCT

(10) International Publication Number
WO 2004/039934 A1

(51) International Patent Classification⁷: C11D 3/395,
3/16, C07D 401/14, C11D 3/39

Harriet-Straub-Strasse 23, 79100 Freiburg (DE). VIN-
CENZI, Cornelia [DE/DE]; Hauptstrasse 120 A, 79650
Schopfheim (DE). DANNACHER, Josef [CH/CH]; Peter
Ochs-Strasse 33, CH-4059 Basel (CH).

(21) International Application Number:
PCT/EP2003/011636

(74) Common Representative: CIBA SPECIALTY CHEM-
ICALS HOLDING INC.; Klybeckstrasse 141, CH-4057
Basel (CH).

(22) International Filing Date: 21 October 2003 (21.10.2003)

(25) Filing Language: English

(81) Designated States (national): AE, AG, AL, AM, AT, AU,
AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU,
CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE,
GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR,
KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK,
MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT,
RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR,
TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(26) Publication Language: English

(30) Priority Data:
02405929.7 30 October 2002 (30.10.2002) EP

(84) Designated States (regional): ARIPO patent (GH, GM,
KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW),
Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),
European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE,
ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO,
SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM,
GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

(71) Applicant (for all designated States except US): CIBA
SPECIALTY CHEMICALS HOLDING INC. [CH/CH];
Klybeckstrasse 141, CH-4057 Basel (CH).

Published:

— with international search report

For two-letter codes and other abbreviations, refer to the "Guid-
ance Notes on Codes and Abbreviations" appearing at the begin-
ning of each regular issue of the PCT Gazette.

WO 2004/039934 A1

(54) Title: USE OF METAL COMPLEX COMPOUNDS AS OXIDATION CATALYSTS

(57) Abstract: Use of metal complex compounds of formula (1) and/or (1') $[L_nMe_mX_p]^qY_q$ (1), $[L'_nMe_mX_p]^qY_q$ (1'), wherein all substituents are as defined in the claims, as catalysts for oxidation reactions, and also novel metal complex compounds and novel ligands.